# REMARKS

In claims 2 and 4 the surfaces defining the mapping are amended to refer to CMY as required in the Final Rejection. Similarly, for clarity in claims 1, 3 and 4, in response to the Final Rejection, the term "first" is added to describe the CMY color space converted to a first gamut in CMYK color space.

In claims 2 and 4 "the" is changed to "a" in reference to "full CMYK color space". This is supported at page 6, lines 20-23 and page 9, line 10.

The extraneous "the" in claim 11 pointed out in the Final Rejection is deleted.

Claims 1, 2-3, 11-12, 14 and 22 are rejected as anticipated by the Decker reference. This is respectfully traversed.

Decker does not map a CIELAB or other color space having a lightness component as described and claimed. Decker first makes patches of a range of CMY information, specifically mentioning 9x9x9 color combinations (col.7, lines 28-38). These patches are then measured for L*a*b* values (col.7, lines 40-45).

Accordingly, at this point Decker has converted a CMY color space to a CMY color space having a lightness component, while this application describes and claims coverting a CMY color space to a CMYK color space.

Decker addresses the K (black) component by separately making a range of black patches from 0% black to 100% black and then measuring each patch for its L*a*b* value (col.7, line 66, col.8, line 13). Decker has thereby converted a shades-of-black color space to a color space having a lightness component. Such a conversion is not part of the description, claims or any necessary aspect of this application.

Decker then uses the CMY L*a*b* values and the shades-of-black L*a*b* to

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form a CMYK color space in which CMY colors are reduced (col.8, line 48, col.9 line 35). Of course, a purpose of this application as described and claimed is to reduce CMY colors and add black (K). However, this application does this differently, which clearly will produce a different result. This application does not use a shades-of-black color space. When the first CMYK color space of this application is converted to a color space having a lightness component, that gamut is modified ("rescaled," in claim 1; "changing the lightness component" in claim 4; "changing a lightness component" in claims 11 and 12).

Decker continues starting at column 9, line 36 by stating that the foregoing CMYK values (referred to as C', M', Y', K') are then employed to print a range of 729 new patches. The L*a*b* of these patches are then measured. At this point Decker has created a color space having a lightness component. Decker states that this could be used "for the inversion algorithm"(col.9, lines 44-45). But Decker does not change a L*a*b* color space of Decker. Decker only teaches some formulas for under color addition (col. 9, line 54 – col. 10, line 10). These formulas do not have lightness as a factor and therefore do not suggest rescaling or changing a gamut having a lightness component. The reference of Decker at column 9, line 45 to use "for the inversion algorithm" apparently refers to somehow using again shades-of-black color space.

Decker also discloses the reading of patches printed from the final CMYK color space to form a table of L*a*b* to CMYK (col. 10, line 66 – col.11, line 8 & col. 6, lines 48-59). Such a table is foreign to this application as this application is to form a table of original (not patch data) CMY or RGB data to CMYK. The non-black substitution and iterative substitution of Decker (see col. 11, line 27 and following) are
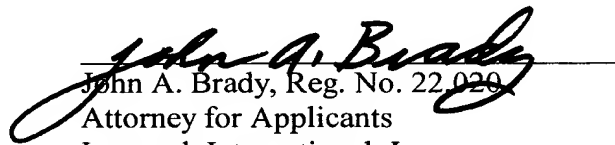
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similar in concept to the shades-of-black substitutions discussed in the foregoing.

Claims 4-6, 16 and 23 are rejected as obvious over the Decker reference and farther in view of the Lin reference. These claims are dependent on claims discussed in the foregoing. Lin is cited for modification of the gamut having a lightness component.

However, Lin is to the transformation of an image from one device to the same image for another device by a recalibration transformation. Thus, Lin could not cure the deficiencies of Decker as the primary reference as discussed in detail in the foregoing with respect to the rejection of claim 1, 2-3, 11-12, 14 and 22.

Accordingly, reconsideration and allowance of claims 1-6, 11, 12, 14, 15, 22 and 23, all of the pending claims, is respectfully requested.

Respectfully submitted,
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